



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/903,414	07/11/2001	Donald G. Wheatley	3110-000032/CPA	8978

27572            7590            05/12/2003  
HARNESS, DICKEY & PIERCE, P.L.C.  
P.O. BOX 828  
BLOOMFIELD HILLS, MI 48303

EXAMINER
----------

AHMAD, NASSER

ART UNIT	PAPER NUMBER
----------	--------------

1772

8

DATE MAILED: 05/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-8

<b>Office Action Summary</b>	Application No. <b>09/903,414</b>	Applicant(s) <b>Wheatley et al.</b>
	Examiner <b>Nasser Ahmad</b>	Art Unit <b>1772</b>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)  Responsive to communication(s) filed on Feb 19, 2003.

2a)  This action is **FINAL**.      2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

**Disposition of Claims**

4)  Claim(s) 1-5, 7, 9-14, and 23-35 is/are pending in the application.

4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) 24-35 is/are allowed.

6)  Claim(s) 1-5, 7, 9-14, and 23 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)  The proposed drawing correction filed on \_\_\_\_\_ is: a)  approved b)  disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)  The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13)  Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)  All b)  Some\* c)  None of:

1.  Certified copies of the priority documents have been received.

2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

14)  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a)  The translation of the foreign language provisional application has been received.

15)  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)

4)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_

2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)

5)  Notice of Informal Patent Application (PTO-152)

3)  Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_

6)  Other: \_\_\_\_\_

Art Unit: 1772

1. Applicant's arguments with respect to claims 1-5, 7, 9-14 and 23-35 have been considered but are moot in view of the new ground(s) of rejection.
2. Examiner has withdrawn the finality of the last Office Action and informs the applicant the "Final" box was checked inadvertently.
3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-5, 7, 9-14 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito (5,635,263) in view Williams (3,239,403).  
Saito relates to an article for reinforcing a structural element (abstract). The article comprises carbon fiber sheet (4) impregnated with resin such as epoxy. The sheet (4) is adhered to a substrate sheet (2) such as a mold release paper (col. 3, lines 33-36) temporarily (col. 3, lines 43-45). However, Saito fails to teach that the sheet (4) has lateral fibers. Williams discloses a reinforcing article comprising a carbon fiber sheet or graphite cloth (col. 2, lines 33-38) coated or impregnated with adhesive (col. 4, lines 16-20, 53-55 and 61-64) to form a sheet (4) with lateral fibers for providing strength to the article. Therefore, it would have been obvious to one having ordinary skill in the art to utilize Williams' teaching of using a carbon cloth with lateral fiber in the invention of Saito with motivation to provide strength to the reinforcing article.

Regular crossectional shape of fiber being rectangular is well known and conventional in the art.

The roughened surface of the tape for promoting attachment would have been obvious based on optimization through routine experimentation.

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 2, 25 and 30 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for cured epoxy (page 4) and pre-cured carbon (page 9) of specification but fails to teach as to what is a "pre-cured carbon fiber", does not reasonably provide enablement for pre-cured carbon fiber and how it is made. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. Without knowing as to how a pre-cured carbon fiber is made, it would not be enabling as to how said fiber is made.

7. Claims 24-35 are free of the prior art uncovered so far in that the article's removable sheet also removes the resin disposed in the openings between the directional fibers.

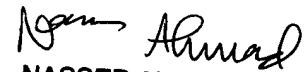
8. Any inquiry concerning this communication from the examiner should be directed to Nasser Ahmad whose telephone number is (703) 308-4424. The examiner can

generally be reached on Monday-Thursday from 7:30 a.m. to 5 p.m. and on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (703) 308-4251. The fax phone numbers for the organization where this application is assigned are (703) 872-9310 for regular communications and (703) 305-7115 for After Final communications.

Any inquiry of a general nature or relating to the status of this application should be directed to the receptionist whose telephone number is (703) 308-0661.

N. Ahmad/dh  
May 8, 2003

  
**NASSER AHMAD**  
**PRIMARY EXAMINER**